

## BLUEPRINTS PREFACE

### STAR PROGRAM CALIFORNIA STANDARDS TESTS

### SCIENCE

These are the blueprints for the STAR California Standards Test (CST) science multiple-choice tests. The “Standards Assessed” column shows the standards tested and numbers of questions included on the science CSTs. As the blueprints indicate, the tests consist of 66 multiple-choice questions, including 60 operational questions and 6 embedded field test questions. Except for the Investigation and Experimentation standards, ✓ marks indicate the standards assessed.

A distinction is made between the content statement that precedes each set of standards and the standards that are actually being assessed, i.e.,

*1. The periodic table displays the elements in increasing atomic number and shows how periodicity of the physical and chemical properties of the elements relates to atomic structure*

- a. Students know how to relate the position of an element in the periodic table to its atomic number and atomic mass.*

At the high school level, science is assessed by discipline rather than grade level. Blueprints are provided for the discipline-specific tests: Biology, Chemistry, Earth science, and Physics as well as for the Integrated/Coordinated Science 1, 2, 3, 4 tests. Standards that all students *should have the opportunity to learn*, identified with an asterisk (\*), are **not tested**, though they are important to the comprehension of the strand. In addition, reference sheets for chemistry and physics are provided and reflect the decision not to test asterisked standards. Also, a revision to the 2005 Physics Reference Sheet has been made for the formula, First Law of Thermodynamics, to include both expressions  $\Delta U = Q + W$  (*on the system*) and  $\Delta U = Q - W$  (*by the system*).

At the elementary level, science is assessed at grade 5 and the Fifth Grade Science blueprint is provided for this test. The test covers the grades 4 and 5 science standards. Forty percent of the test assesses grade 4 standards and sixty percent of the test assesses grade 5 standards. As with the high school level tests, Investigation and Experimentation standards comprise ten percent of the test questions. The Fifth Grade Science blueprint contains a standard that, while important, is not assessable in a multiple-choice format. This standard has been clearly identified with the notation NA\*. In addition, reference sheets, including an abridged periodic table, the Mohs Hardness Scale, and a mineral identification table, are provided.